

THE
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ORIGINAL DEPARTMENT.

Communications.

DEATH;

Causes which produce its sudden occurrence in
Pulmonary Tuberculosis.

By A. P. DUTCHER, M. D.,

Of Enon Valley, Lawrence County, Pennsylvania.

As cold is the absence of heat, and darkness of light, so is death the absence of life. Man, unenlightened by Divine revelation, has wearied his mind in attempting to solve the problems of life and death. Science has never detected that subtle agent which gives life, power, elasticity, and beauty to the human form; neither has it developed those laws by which death claims his victim, after a brief and troublesome existence. It is true, physiology teaches us, that according to the laws of development and growth, every living creature has its period of infancy, youth, maturity, and decline. And that all these periods, or rather changes in the system, occur as the result of certain fixed laws, that the Creator of all things has ordained; development and growth on the one hand, degeneration and decay on the other—life and death—both as mysterious as they are incomprehensible. And the benighted materialist is ready to ask, "Why do I live?" "Why has nature demanded so dread a penalty for a few fleeting moments of my existence?" "I shudder in silence at the inscrutable destiny of creation."

But away with such gloomy thoughts, turn your eyes from nature's darkness to the path of life, a beam of light from the Celestial Throne is streaming upon it. Listen to that cheering voice: "I am the resurrection and the life." "I have dispelled the darkness of the tomb and brought life and immortality to light." Wonder not, then, at the inscrutable destiny of man. Death is not an eternal sleep. The day-star of hope now gilds the passage to the grave, and faith, like the rainbow of promise spans the dark river of dissolution. Death to the man of faith is not a "leap into the dark. He knows that it is the termination of his

earthly pilgrimage, but not the end of life. He feels that there is a glorious immortality beyond. Nature speaks to the senses alone; hence the materialist is bounded in his vision and desires by the things of time. He sees nothing beyond, life is a mystery, and death the greatest of evils. But not so with the spiritual man, he looks forward to another state, and considers each moment that he lives as big with the destinies of eternal ages; life is, therefore, to him a profound reality, and death but the prelude to a life that will never end.

But some criticising and irreligious doctor may be ready to ask, what has all this to do with the causes of sudden death in phthisis? In some respects nothing, and in others much. Physicians are men, and they are accountable for their actions to the same Almighty Judge that other men are, and it is just as important that they should have correct notions of life and death as other men, that they may make a wise improvement of the former, that they may be fully prepared to meet the latter. How often is it the case that in the exercise of our vocation, we exert every faculty to save the lives of others, and when unsuccessful mourn over their untimely fate, and never think for one moment that we too must die. It is a gloomy subject to contemplate I know. To die; to be separated from all the things in which we have found occupation, if not enjoyment; to close our ears for ever upon the busy hum of life; to shut our eyes upon the verdant fields of earth, the glorious heavens, and the shining sun; and lie down in the silence and corruption of the grave, is indeed an appalling reflection, and it is no wonder that we shrink from its contemplation. But this is no reason why we should banish its thoughts from our minds. Death will come. Nothing can hinder the event. To be prepared to meet it, we should make it a subject of frequent reflection. In this way it may be disarmed of half its terrors.

But we were to treat of its sudden occurrence in phthisis. In this disease the cord of life is not generally very abruptly sundered. The patient frequently has months to prepare for death. The wasting away of the frame is so gradual, and the suffering attending it so inconsiderable, that he is not aware of his danger until he feels his life departing on his expiring breath.

The average duration of phthisis has been set at eighteen months, but in very many instances it is not prolonged to half this period, death supervening suddenly from accidental complication, such as:

1. Cerebral apoplexy.
2. Perforation of the pleura.
3. Perforation of the intestines.
4. Bursting of a large abscess into the bronchia.
5. Sudden and profuse hæmoptysis.
6. Acute pleurisy, pneumonia and catarrh.

I.—Cerebral Apoplexy.

Every physician who has been much in the practice of treating individuals suffering under pulmonary tuberculosis, must have occasionally met with instances of the sudden termination of this disorder, by the supervention of this fatal complication. The symptoms which precede the accident are commonly very obscure. The patient will sometimes complain of slight pain in the head, inability to sleep, and a loss of intellectual power, but aside from these complaints there is nothing to call particular attention to any special brain trouble.

Three years since I had under my care a man aged 35, of the nervous bilious temperament. He had a hereditary title to phthisis, his father and mother having died with the malady. He had suffered with marked symptoms of pulmonary tuberculosis for about four months. He was still, however, able to attend to his business most of the time; complained chiefly of weakness, and a cough which troubled him at night, preventing sleep. Of late he had emaciated considerably, and his friends had discovered a marked change in his disposition; naturally he was passionate and violent in his temper, but now he was mild as a lamb, and his countenance wore an expression of great tenderness.

One morning, just after rising, he had an apoplectic paroxysm. I did not see him until three hours afterward. He had partly regained his mental faculties; but could not speak. He appeared to hear as well as common, and answered all our questions by physical signs. There was also paralysis of the right arm and leg. He could not protrude his tongue but a short distance beyond his lips, and its point was directed toward the right side of the mouth. During the remainder of the day and succeeding night he rested well, took food and medicine without difficulty.

The next morning, while I was seated by his bedside, about the same hour, he was suddenly seized with the most violent convulsions. His face and eyes twitched with the greatest rapidity in almost every possible direction; his countenance at first was quite flushed, but in a few

seconds became very livid; the respiration at first was very rapid, but soon was almost suspended; whenever air was expired the cheeks flapped outward; the pulse could scarcely be felt at the wrist, while the carotids were pulsating most violently, and the jugular veins were very much engorged; the pupils were dilated, and the limbs flexed, but their muscles were not rigid. In less than five minutes from the commencement of the seizure, the respiration ceased, and the patient was dead.

Post-mortem showed extensive tubercular softening in the superior lobe of the left lung, with limited, crude tubercular indurations in the right. The left hemisphere of the brain near its central connection, was found very much softened, its structure was lacerated, and a large apoplectic clot, weighing two ounces, was removed. The pathological character of the softening was tubercular; granulated nuclear corpuscles of an ovoid or somewhat irregular shape, interspersed with granular blastema, and particles of oily matter were found, until the softening was imperceptibly lost in the healthy brain tissue.

It may not be out of place just here to observe, that tubercular disease of the substance of the brain is a very rare disorder. It is mostly confined to the membranes of the brain; the pia mater assumes the miliary variety. They are not seen in the free surface of this membrane or the arachnoid, and seem in no way connected with these membranes. In size they are about as large as a pin's head, and appear in the form of grey granulations, imbedded among a vascular network. This constitutes its prevailing pathological features in the tubercular meningitis of children. In the adult subject, however, tubercular deposits occur most frequently beneath the pia mater, on the surface of the brain, forming irregular nodules within the cerebral tissues, of various shapes and sizes. These nodules are confined principally to the inferior part of the cerebrum and cerebellum, and when they soften form abscesses, that may be readily taken for those which occur in common inflammation of the brain. In this respect our case was unique, the tubercular disorganization being exclusively confined to the minute structure of the brain, which was clearly demonstrated by the use of the microscope.

Our patient was an individual of more than ordinary intelligence; he was a hard student. For some time after his health began to fail, he continued to tax his mental powers beyond what he was able to bear, and as his memory failed him, it appeared to be only a stimulus to redouble his mental energy. This no doubt augmented his lung trouble, and perhaps was an incidental cause of the tubercular deposit in the brain, and its fatal sequence. There is not the least doubt but

the overtaking of the mental powers of children, especially those who are the subjects of the tubercular diathesis, will sometimes produce tubercular meningitis. I can now call to my remembrance several little children who have died with this disease, that was mainly induced by too much mental excitement. Children of the tubercular temperament are usually gifted with very active mental organs, they are apt to learn; and, under a false and erroneous system of education, the physical powers are not properly attended to, the brain is overworked, tubercular meningitis is induced, and the little sufferer fills a premature grave. The most watchful care should, therefore, be exercised on the part of those who have the charge of the physical and mental training of children, to avoid such debilitating measures as will be likely to increase the tubercular dyscrasia, and studiously avoid such causes as will produce too much mental excitement and disturb the healthy functions of the brain.

[To be continued.]

GUN-SHOT WOUND

OF THE

Frontal Bone, with Loss of the Orbital Plate, Brain, etc.

By LAURENCE TURNBULL, M. D.,

Of Philadelphia.

Author of "Hints and Observations on Military Hygiene."

Since the publication of the interesting case of E. V., 55th Ohio, by me in the *REPORTER* for June, I have been furnished by Dr. J. D. HALL, U. S. V., 24th New York, with full notes of the case up to his death. It is most remarkable that vision should have remained after loss of the frontal bone with the orbital plate, injury of supra-orbital nerve elevator muscle, with so much loss of brain. It is a well-recognized principle in ophthalmic surgery, that if there is a lesion of the first branch of the fifth pair, vision is lost, yet the pupil does not become dilated, the iris retaining its usual action, although the retina may be insensible and vision gone.* The following is Dr. Hall's letter:—

EMORY HOSPITAL,
Washington, D. C., Aug. 1862. }

On the 30th August, 1862, EDWARD VOLCK, private in the 55th Ohio Infantry, was wounded at the battle of Bull Run, number two, by a musket ball which struck him half an inch above the right eyebrow, and about the same distance from the median line of the os-frontis, communicating and carrying away the os-frontis to the extent of one and one-fourth by two and one-fourth inches, and making a proportionally larger scalp wound. The

course of the ball must have been oblique from the left, else the head of the subject of these remarks was turned to the right when he was struck, as about one-third of the ball was found cut up on the edge of the frontal bone, the other two-thirds must have passed outwards, as it could not be found inside the skull on post-mortem examination.

His own statement of the case was as follows: He was about to fire his piece when struck; staggered, but did not fall; in a moment or so he recovered, fired, loaded and fired again, then fell, where he lay on the field six days and lost more than a teaspoonful of brains. On the eighth day after receiving the injury he arrived here, which was the 7th of September, when he had his wound dressed for the first time; took out many pieces of bone, found about one-half of the two plates which compose the frontal sinus turned in edgeways on the brain, which could not be removed for arterial hemorrhage. There was a great quantity of fetid pus and about one teaspoonful of brain escaped. The most remarkable features in the case are, that there is no cerebral disturbance, no impairment of vision, pulse normal, in short, no complaints whatever. He acted the most rational of all the patients in the ward, and I had liked to to have said, the most sensible.

In dressing used adhesive straps, as much to prevent the eyebrow from falling on the cheek as to approximate the edges of the wound, which gave the muscle of the upper eyelid a point of support, enabling him to raise the lid, when he remarked, he could see as well with the right eye as he ever did. When dressed, he expressed himself as comfortable, got up, sat down, read his newspaper with the greatest composure; cautioned him against reading much.

Sept. 8th. When the dressing was removed he presented a very singular appearance, fully one-half of the scalp being shaved, and the cerebri-hernia, excrescence-like, protruding of the size of a walnut, heaving with every pulsation. Succeeded in removing bones of frontal sinus with slight hemorrhage; pus plentiful and better, with about a teaspoonful of softened brain matter.

Sept. 9th. Appetite not good; tongue cannot be protruded, owing to injury to temporal muscle, but from what was seen, was covered with a white, thick fur, tip red.

Sept. 19th. He has continued from last date with little change in his condition, except that he is more sensible of pain when the wound is dressed; its edges look exceedingly healthy; pulsating tumor has receded, and nature seems to be putting forth all her energies to close the opening.

Sept. 20th. Bowels have become irritable and seemingly a lack of control over them, with an

* See Hints and Observations by the author, pp. 51, 55, Gun-shot Wounds of the Eye. Philadelphia, 1862.

indifference on the part of the patient. Held the bowels up with plumbi, acetas, ipecac., and opium, but found his strength was failing, although his memory was perfectly clear. When asked if he had any wife, child, or relatives he wished written to in the event of his death, his answer was invariably, no; remarking, if a man had to die there was no use of making a fuss about it.

Sept. 22d. Although every attention was paid to his diet, as well as mur., tinct. ferri, three times a day, he continued to sink, although the diarrhoea was checked. He never rallied from its effects, and finally died at half past three o'clock on the morning of the 25th.

The post-mortem revealed a much more congested and inflammatory condition of the brain and its membranes than the weakened pulse of a few hours previous would have indicated; there was also a large quantity of watery effusion into the ventricles, mixed with pus. The fracture of the parietal bone, as will be seen by the specimen, is much more extensive than we would have supposed, reaching to within two inches of the occipital bone, a distance of five inches from the seat of the injury. There is also a large clot between dura mater and the skull at the suture of os-frontis and parietal bones. Such extensive injuries precluded any possibility of ultimate recovery.

He had the least complaints of any patient in the ward. Peace to his ashes.

EDITORIAL DEPARTMENT.

Periscope.

DOMESTIC.

A Deaf Mute Restored to Hearing by an Attack of Variola.

Dr. J. J. SAMUELS, of Marion, Illinois, reports the following extraordinary case in the *Chicago Medical Examiner* for April 1863.

GEORGE H. DICKINSON, a deaf mute, aged 45 years, was seized with the usual symptoms of an attack of small-pox, 14th March. There was nothing remarkable either in the eruptive fever, the appearance of the eruption, (which was confluent,) the maturation of the pustules or secondary fever. The patient passed on to convalescence, and is now completely recovered. But, what is rather strange, the patient, during his illness, became able to hear with the left ear, the other remaining closed, and could talk almost immediately after he could hear. While visiting him on the evening of the 21st, (which was the fourth day of the eruption,) he wrote upon his slate these words: "I heard to-day about twenty minutes as plainly as you ever did, how do you account for it, doctor?" I paid but little attention to this, and hastily replied, that I supposed, the inflammation in the throat had affected the ear through the Eustachian tube.

On the evening of the 22d, he complained of pain

in the left ear; and, on examination, I discovered a slight discharge of muco-purulent matter from the external meatus. One of the attendants informed me that the patient heard the noise made by the lowing of a cow near his room, and had also heard thunder in a storm-cloud that passed over.

On the morning of the 23d, while at his bedside, I observed his attention was attracted by the singing of birds near his room. I told him that it was the birds singing, and asked him what kind of music they made. In reply, he whistled in imitation of them. This was the first satisfactory evidence I had had that he really could hear. He still complained of pain in his left ear. Being called to the country, I did not see him on the 24th, he being visited by my preceptor and partner, Dr. A. N. LODGE. On entering the door of his room on the morning of the 25th, I bowed and inquired how he got along, to which he replied "bully;" and it took him but a few minutes to tell me the following, which I had already learned from Dr. LODGE:—"When he awoke on the morning of the 24th, his head was filled with very loud and confused sounds. The confusion and astonishment, for the moment, produced a distraction of the mind. On regaining himself, he wished some explanation of the phenomena, he called out distinctly 'where is doc.' He also discovered that he could hear his attendants talk, and could repeat the words after them."

It took him but a few hours to learn a sufficient number of words to converse on ordinary subjects; indeed, it appears to me that he could speak words that he never heard spoken. He now hears and speaks with as little difficulty as any one.

The following questions have occurred to me concerning the case:—1st. Did he never hear before? 2d. What influence had the disease on the organs of hearing? 3d. How could he so readily speak after he could hear? As regards the first question: I found the evidence that he had not heard or spoken for 25 years, conclusive. Many of our best citizens have known him for that period without a suspicion ever arising in their minds that he could hear or speak. Further back than that, we have only his evidence, which in his own language is: "So far as my recollection of myself reaches back, I never did hear; and, to the best of my knowledge, my parents taught me that I never could hear." So we are left to suppose either that he could hear in infancy, but that by disease it was destroyed while very young, or that he never could hear. I leave each one to their own supposition as to what influence the disease exerted on the function of hearing. I could not now, and, perhaps, never, give a better answer than I gave to the patient, when he requested an explanation.

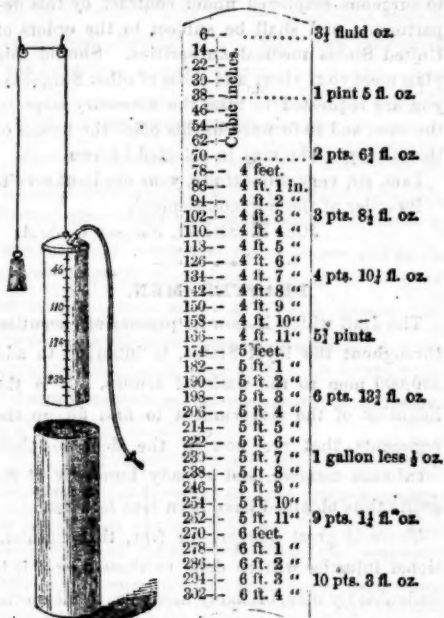
I hope men more competent than myself will endeavor to explain this matter, in regard to the third question,—"how could he so readily speak after he could hear?" I might state that Dickinson has a fine education, and completely mastered, among other things, that most difficult science, labiaology, which was taught him by the late Dr. J. K. MITCHELL, of Philadelphia, under whose instructions he was for four years. A brother and a sister of DICKINSON's were also deaf mutes; his parents were cousins. He has been married once, his wife was a deaf mute also. He has two living children, a son and a daughter, the former aged five and the latter four years, and both are blessed with perfect hearing and speech.

A Cheap Spirometer.

W. E. BOWMAN, M. D., Editor of the *Canada Lancet*, publishes in that journal the following description of a cheap spirometer, which may be found very useful by our readers:

A cheap spirometer may readily be made from two tin vessels similar in shape to the ones figured in the accompanying wood cut; the one should be about twenty inches long and six inches in diameter, and

the other eighteen inches long and five inches in diameter. The latter may be graduated into spaces of eight cubic inches by means of our ordinary gallon measure, which is the old wine measure of Great Britain and the one that is adopted by the United States Pharmacopœia; it consists as everybody knows of eight pints of sixteen ounces each, the ounce measuring 1.8 cubic inches.



Having placed the smaller vessel perfectly upright, measure into it a gallon of water less half an ounce, and with a rule ascertain the precise distance from the surface of the liquid to the brim of the vessel, then placing this measure outside of the tin, mark the height of the water as 230 c. in. In a similar manner with half a gallon and 10½ fluid ounces, mark 134 c. in.

Next divide the space between these two points into twelve equal parts, which will be measures of eight cubic inches each, and with the compasses continue the graduation upwards and downwards, placing the figures on the inverted vessel as here shown. If its diameter be everywhere alike the measure must be correct, its accuracy however may be readily tested by the annexed subdivisions of the same measure. The pulleys and counterpoise may now be adjusted to the graduated tin.

Next fill the larger vessel with water so that the smaller may be just covered when inserted as low as possible into it, and mark the height of the water on the inside of the larger tin. Then raise the small one gently until the 174 c. in. line appears even with the surface of the water, and make a second mark of its level. Finally put the third graduation in the large tin when the smaller is raised completely out of it.

Lastly, affix two or three feet of flexible tubing and a mouth-piece to the top of the small tin, and the spirometer will be ready for use.

The graduation inside of the larger vessel is to detect and obviate any difference in the level of the water within and outside of the rising vessel, which after receiving the breath should be depressed until the water is at its proper level, the tube being closed by the fingers during the adjustment and reading off.

With this scale as a guide the York Glass Company of England has made me a beautiful spirometer of this form entirely of glass, and correctly graduated into cubic inches. It differs somewhat from this one in having a perforated glass stopper in the centre to which the silk-covered tubing is attached; and also in having two cords, one each side of the stopper, and four pulleys which prevent it from turning. Thus arranged and mounted on handsome brackets, apart from its usefulness in ascertaining the presence and progress of phthisis, it forms an elegant addition to a surgery.—*Canada Lancet.*

New Hemostatic.

Dr. T. L. PHIPSON writes to the *Chemical News* that "at a recent meeting of the Société des Sciences Médicales et Naturelles of Bruxelles, the subject of a new hemostatic agent, lately discovered by Dr. PIAZZA, Professor of Organic Chemistry in the University of Bologna, was brought forward. This substance, destined, as its name indicates, to stop a flow of blood from wounds, appears to be one of the most successful therapeutic agents ever prepared, and I hasten therefore to call attention to its composition; being yet known only in Italy and Belgium, it is certainly destined to render great services in our hospitals, &c. Before alluding to the manner in which it is prepared, I should perhaps state that the liquid in question has been experimented already with the greatest success in the hospitals of Parma, Modena, and Bologna, also in several hospitals in Bruxelles by members of the society above named, and has been unanimously declared to be the most effective agent in stopping a flow of blood from a wound ever discovered.

"In making numerous experiments upon the substances which are capable of coagulating blood, Professor PIAZZA found that the coagulum produced by chloride of iron was rendered so compact by an addition of chloride of sodium that the vessel containing the mixture may be reversed without a drop flowing out. No other coagulating liquid will produce such an effect as this. Now, when chloride of iron is used alone, it is necessary to employ it tolerably concentrated, (25° to 30° Baumé,) which occasions much pain and irritation. But if common salt be added, the liquid is efficacious with a much weaker solution (10° to 15° B.) of chloride of iron. The best means of preparing the new hemostatic liquid consists in taking a solution of chloride of iron marking 10° to 15° of Baumé's areometer, and adding to it an equal volume of a concentrated solution of pure chloride of sodium. One precaution must be attended to, namely, that the chloride of iron contain no free acid. This is avoided by evaporating the iron solution to dryness, and redissolving in water. The liquid is used by immersing in it the linen destined to bind the wound." &c.—*Dental Cosmos.*

Diuretic Wine.

M. TROUSSEAU has proposed the following new formula for diuretic wine:

Take of Juniper berries, well bruised, 600 gr.
 Digitalis, in powder, 130 "
 Squill, in powder, 60 "
 White wine, a pint.
 Macerate during four days, and add
 Acetate of Potassa, 180 gr.

Express and filter. The dose of this wine is two or three tablespoonfuls per day. M. TROUSSEAU proposes to call this preparation "Vin diuretique de l'Hotel Dieu de Paris," where he made his chemical experiments.—*Bul. Ther. and Jour. de Pharm.*

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 1, 1863.

SURGICAL AID ON THE BATTLE-FIELD.

The experience in the great battles of last year showed the necessity of some provision being made outside of the regular medical service of the army for the surgical care of the wounded immediately after a great battle.

The utter impossibility, when there were thousands of wounded to care for, to have their wants properly attended to by the regular Surgical Corps of the army, was fully demonstrated on several occasions. So was the necessity of having some systematic provision made for extra surgical aid.

The matter was again and again urged on the attention of the Surgeon-General, yet nothing was done, and another terrible battle has been fought and the wounded left with very inadequate surgical care.

According to the most recent statements, the number of wounded left on the battle-field of Gettysburg must have exceeded 20,000—it has been estimated as high as 30,000. One thousand Surgeons, in addition to the regular Surgical Corps of the army who could be spared from their regiments, would not have been too many to give the wounded the attention their condition demanded. Yet no adequate arrangements for extra surgical aid were made, and when the Governor of this State tendered such aid, it was somewhat superciliously refused.

We are very glad to observe by the following circular letter, addressed to the Governors of New York, Pennsylvania and Massachusetts, that the Surgeon-General, who personally visited the battle-field, saw his error, and that he is disposed now to correct it.

SURGEON-GENERAL'S OFFICE,
Washington City, D. C., July 27. }

SIR:—It seeming desirable to secure abundant surgical aid for the exigencies of the battle-field, the following plan is suggested, in which your co-operation is requested.

It is proposed that thirty Surgeons, for whose ability and skill you can vouch, organize a voluntary aid corps, to render aid to the wounded immediately after a battle, and to hold themselves in readiness when notified by telegraph from this office, through you.

As the want of concerted and subordinate action has been the chief obstacle to the success of such organizations in the past, it is deemed proper that the gentlemen thus volunteering shall guarantee to serve for at least fifteen days; shall receive or not, at their pleasure, the compensation allowed to surgeons employed under contract by this department; and shall be subject to the orders of United States medical authorities. Should this plan meet your views and those of other Surgeons, you are requested to take the necessary steps in the case, and to forward to this office the names of the aid corps who may be selected by you.

I am, sir, very respectfully, your obedient serv't.
By order of the Surgeon-General.

JOS. R. SMITH, *Surgeon U. S. A.*

DRAFTED MEN.

The draft which is now in process of execution throughout the loyal States, is intended to add 300,000 men to the national armies. It is the intention of the Government to first fill up the regiments that are now in the field to their maximum number, and already hundreds of recruits thus obtained have been sent forward.

There is great danger, we fear, that unintentional injustice will be done to these men. It is undoubtedly wise, on many accounts, to fill up the skeleton regiments. We will not enumerate the advantages gained by it, as they do not have to do with the health of the recruits. The disadvantages having this vital interest attached to them properly fall under our cognizance.

We will assume, which will probably be the fact, that the drafted men are all in a sound physical condition. They go into camp healthy men. But, by being put into regiments with men who have become inured to the toils and hardships of camp life, long marches and the battle-field, and required to partake in all these labors to which they are entirely unaccustomed, there is danger that many of them will break down prematurely and lose their lives or health before they have rendered the Government much service.

Suppose, for instance, after several thousand of these raw recruits have been added to the army of the Potomac, it should be ordered on one of its long, fatiguing marches, like that from Falmouth, Va., to Gettysburg, Pa., when the army marched an average of twenty miles a day for several days in succession and then fought one of the most

sanguinary battles of modern times. How would it be possible, when hundreds of veteran, inured troops fell out of the ranks on each day of the march, for raw recruits to survive?

This is a matter worthy the consideration of the officers of the Government, and especially should the Medical Bureau of the army call attention to it.

STREET CLEANING.

Some weeks since, we spoke of the good effects of the appointment of a new City Inspector in New York. After many vain attempts to nominate a person for that office who would be acceptable to the City Fathers, the Mayor proposed the name of one of their own number, Mr. F. I. A. BOOLE. In accepting the position thus unexpectedly thrust upon him, Mr. BOOLE pledged himself to the task of immediately cleansing the streets, which were in a very filthy condition.

With what success he has addressed himself to the labor he undertook, may be judged by the statement that during the past five weeks Mr. BOOLE has had 1,400,000 cart loads of manure, filth, and garbage removed from the streets! No wonder that New York has had the unenviable reputation of being one of the most unhealthy cities in the world! We trust that the good work commenced by Mr. BOOLE will be continued, and that his example will prove contagious.

The sanitary condition of Philadelphia, we fear, is likely to suffer sadly from neglect of cleanliness. The streets of this city have been much neglected, and it need not surprise our readers if they find the mortality of this city increasing, while that of New York is diminishing. It would seem, from discussions in our City Councils, that the Contractor for cleaning the streets has neglected his duties, and two departments of the City Government are at loggerheads as to which should attend to the business. In the meantime the accumulation of filth, and the noisome exhalations from the street gutters give no ground to hope for favorable sanitary reports during the sickly months whose cycle has just commenced.

Prof. SCANZONI has gone to St. Petersburg to attend the Empress of Russia during her confinement.

Notes and Comments.

Long Island College Hospital.

The Fourth Annual Commencement of the Long Island College Hospital was held in Brooklyn on the 2d inst. The number of matriculants during the term was *fifty*, and the number of graduates *sixteen*. The Hippocratic oath was administered to the graduates by Dr. MITCHELL. The address to the graduates was delivered by Dr. AUSTIN FLINT, and the valedictory on the part of the graduates by ALFRED W. MERRILL, of New York.

Army Medical Museum.

We are indebted to Surgeon-General HAMMOND for a copy of the Catalogue of the Army Medical Museum to January 1, 1863. At that date the Surgical section contained 959, and the Medical section 106 specimens. The Museum also contained 289 specimens of miscell.

Under proper care and cultivation, the Museum will become a very valuable pathological cabinet. Dr. HAMMOND is an excellent physiologist and his assistants, Drs. WOODWARD and BRINTON, are first rate pathologist.

Philadelphia Dental College.

In our advertising columns will be found the announcement of the first course of Lectures in the Philadelphia Dental College. This is the second dental college in this city. Its founders, regarding Philadelphia as the great centre of Medical education, claim that it may be made the centre of Dental education as well.

This is very true, and we predict that the effect of opening a new Dental College here will be, by the second session, to double the number of dental students in this city.

A very small proportion of those who practice dentistry are graduates at all, and if a reasonable multiplicity of schools shall have the effect of increasing the number of scientifically educated dentists, so much the better.

The gentlemen connected with this institution are favorably known in this city, and we doubt not the enterprise will command success.

Medical Department of Yale College.

Dr. LEONARD J. SANFORD, of New Haven, has been elected Professor of Anatomy and Physiology in the Medical Department of Yale College. Dr. SANFORD's education and acquirements render his selection for this responsible position a very proper one, and we have no doubt he will fill it with credit to himself and to the institution. The former occupant of the chair was the late Dr. CHARLES HOOKER.

An Engineer Regiment.

Our friend Dr. A. L. KENNEDY, of the Polytechnic College in this city, has been selected by Government to raise an Engineer regiment for service in the army. Such a regiment will find a plenty of useful employment in building bridges and doing other pioneer work of a marching army, in planning fortifications and intrenchments, laying out camping grounds, etc., etc.

Correspondence.

FOREIGN.

LETTER FROM W. N. COTE, M. D.

GENEVA, June 25th, 1863.

Electricity.

MR. EDITOR:—M. A. DE LA RIVE, of this city, publishes an interesting paper on the propagation of electricity through rarified elastic fluids. Starting from M. GRASSIOT's experiments, proving beyond a doubt, that an absolute vacuum does not transmit electricity, M. DE LA RIVE commenced a series of researches on hydrogen and nitrogen, two simple and unalterable gases, which, although differing considerably in chemical and physical properties, have yet one important property in common, viz.: That of exercising no action on metals. To measure the elastic force of these gases, he employed a nanometer delicate enough to manifest a difference of pressure as small as one-fiftieth of a millimeter, (a millimeter being equal to about half a line.) The intensity of the electric jet was determined by two platinum wires passing through distilled water, which formed part of the principal circuit, and communicating with the ends of a very sensitive galvanometer. The distance between the two extremities of the platinum wires might be varied by means of a micrometric screw, so that the derived current might always produce the same deviation in the galvanometer, say 30 deg., for instance. The gases to be experimented on were inclosed in tubes of about two inches. The electrodes, consisting of platinum balls, could, if necessary, be even brought into contact. The facts brought to light by these experiments are:

1. That when the gases above alluded to have arrived at a degree of rarefaction approaching to that which corresponds to their maximum conducting power, the latter is in the inverse ratio of the length to be gone through.

2. That, as the pressure diminishes, that is, as the gas becomes more rarefied, the jet of flame becomes continuous, the flame itself appears divided into strata, and at length a black space, which gradually increases, separates the extremity of the luminous column, from the negative electrode, which becomes enveloped in a bluish atmosphere.

3. That if, when the pressure has been greatly reduced, a small quantity of gas be admitted into the

tube at the negative, while the electricity is still flowing, annular rose-colored stripes are suddenly perceived in the black space; if, on the contrary, the gas be re-admitted at the positive end, a thin but brilliant jet of light will be seen darting through the luminous columns, which latter will at once invade the whole black space near the negative electrode.

4. That there exists a difference of temperature between the black space near the negative electrode, and the luminous part near the opposite one.

5. That if an electro-magnet be placed on the side of the black space, the conducting power of the medium diminishes in the ratio of 30 deg. to 10 deg.; if on the contrary it be placed near the positive electrode, there is no variation, while, if it lie between, the variation is from 30 deg. to 25 deg., and

6. That magnetism will give the luminous jet a rotatory motion which will increase to 100 revolutions per minute.

Fissure of Anus in Children.

Dr. GAUTHIER, of Geneva, gives some interesting details on the fissure of the anus in children. The attention of the profession has been called to this disease only within the last few years. Although it is generally considered as a comparatively rare affection, yet Dr. GAUTHIER shows that it is exceedingly common, especially in children, and that this disease is, in most cases, the cause of constipation, and other symptoms presenting all the characteristics of cerebral congestions, dyspepsia, gastralgia, and tympany. As a general rule will be found in the anal region a superficial ulceration, which occupies, in the form of a sulcus or irregular groove, the mucous membrane and radiated folds of fine skin that are fused into each other near the verge of the anus. It is not an easy task, always to determine the extent of the furrow without the assistance of the speculum or the introduction of a finger into the rectum. The fissure seldom penetrates through the substance of the mucous membrane. It occupies the back and sides of the anus, is rough, irregular, and reddish on the bottom, when spread open, and its projected margins indurated, protuberant, or serrated. There are three varieties of fissure, according to DUPUYTREN—above, below, and on a level with the sphincter. Dr. GAUTHIER has never found it above the sphincter in the case of children. The cause of the anal fissure has been attributed to the spasmodic action of the sphincter muscles, but our author is under the impression that fissure always precedes the anal constriction, and that even in examples of anal stricture without fissure and independent of all traumatic lesion, the patient, in his youth, had had fissure of the anus which had momentarily cicatrized. A lymphatic temperament and scrofula predispose to this disease, owing to the mucous or purulent exudations of the membranes to which they give rise. It may be caused also by intestinal worms, especially the thread or maw-worms. As regards the treatment, Dr. GAUTHIER advises, in most cases of the kind, the introduction of rectum bougies, covered

with an ointment composed of hog's lard, rantahia, and belladonna. In a few days, the symptoms are so mitigated generally as to supercede the necessity of other applications. In some instances, however, nothing less than the caustic will answer the purpose of effecting a cure. The lunar caustic should be tried only after more simple remedies, such as opiate and mercurial lotions, have failed. In one case only Dr. GAUTHIER was obliged to have recourse to a more violent treatment. He effected a cure by introducing successively into the rectum three fingers—the constriction of the sphincter then gave way and the young patient recovered. The use of the bistoury has never been found necessary.

[To be continued.]

DOMESTIC.

A CASE OF PHANTOM TUMOR.

WASHINGTON, N. J., July 20, 1863.

EDITOR MED. AND SURG. REPORTER:—Mrs. R., aged about twenty-five, having been married about eight months, conceived herself to be pregnant, and began to make the necessary preparation for the event, which was expected to take place in the course of two months. I was called upon as her medical adviser, but she, being of a good constitution and healthy, nothing was required at the time. Proper advice was given, and the expected period was patiently waited for. The supposed period of confinement arrived, and so did the nurse. After waiting two weeks, I was again called for the purpose of consultation, everything seeming to be regular and only ordinary inconvenience experienced. I counselled patience, presuming that an error in time had been made. Two weeks more elapsed, and again I was called; I now made more particular inquiry, but nothing could be elicited that would indicate that conception had not taken place at the time specified. Cessation of the menses, morning sickness, enlargement of the abdomen and breasts, the peculiar areolar discoloration, had all made their appearance at the proper time and in their regular course. Quickening had also occurred at its proper period after the supposed time of conception. The sensations of quickening, as related by her, were usual; nothing in the whole case was a departure from the ordinary history of such cases. I again counselled patience, as the case did not seem to warrant any interference. Two or three weeks now elapsed, when, patience becoming exhausted, I was called upon again, and now deemed it advisable to make a thorough examination per vaginam and by auscultation, when, to my own astonishment and that of my patient, I became satisfied that she was not pregnant.

I immediately prescribed purgatives, emmenagogues, salt bathing, change of air, out-door exercise, riding in carriage, and as soon as practicable, on horse-back. The patient left on the next day, and I saw nothing of her for six months; she was then entirely well. On inquiry, I learned that immedi-

ately on commencing her course of treatment she began to feel relief. The abdomen began to diminish in size, the breasts to become flaccid, and a gradual return to a healthy condition took place. This change was entirely gradual, no unusual or sudden discharge of flatus, feces, menses, or water, taking place. In fact, there had been no accumulation of either during the abnormal condition of the system. All the functions of the organs of the body being performed regularly and properly, except the menstrual flow, which took place some three months after the patient left my charge, and then in a perfectly healthy manner. She has since borne four children, all healthy, and in neither case has there been ought to require medical interference from the period of conception to confinement. In a conversation in relation to the birth of the last child, she stated that nothing had occurred during gestation with her children that she did not experience in the first instance.

I report this case as being one full of interest from the peculiarities connected with it, and so entirely different from the reports of what might be considered similar cases, and invite a solution of the phenomenon from the profession.

JOHN V. MATTISON, M. D.

"CALOMEL AND TARTAR EMETIC—EMINENT MEMBERS OF THE PROFESSION," ETC.

ITHACA, TOMPKINS CO., N. Y., }
July 18, 1863.

EDITOR MED. AND SURG. REPORTER.—It seems to me that a little *practical common sense* will fully reply to the Surgeon-General's Order "No. 6." Calomel cannot be dispensed with by any one who knows its value. It is too old and simple a remedy to justify any abuse, that is, any injury done by it.

My answer to what extent do I use mercury, is, in greater or less quantities in two-thirds of my patients or cases. I do not, indeed, regard mercury as indispensable, but it would be very inconvenient to do without it. For example, in the question of railroads versus canals, the road is very convenient, swift and sure, yet not indispensable. Again, I could walk to Philadelphia, but would rather go on a canal or horse-back, or any way but sweat, at a three-mile-an-hour foot jog. I cannot see how surgeons in the army could do without calomel.

In my own practice, I find I use but four mercurials, calomel, yellow iodide of mercury, the two ointments, the blue and the nitrate, and I ought to add the blue mass. Of late, the mild or yellow iodide of mercury grows in my esteem. It is easily prepared in one's own office by one's own hands, cheap, and more quickly acts on the system than any other form for any purpose. It is a free cathartic; it is in a very brief period absorbed and in the circulation; it is as safe and as mild as any of the mercurials, and its over-dose can be more quickly checked by chlorate of potash. It can be given in large doses as well as small, and does not annoy the patient.

My rule is *never to salivate*. As soon as the breath smells slightly of the article, I use freely the *invaluable* check of chlorate of potash. If I compare mercury to the locomotive, then chlorate of potash is the throttle valve that rules the monster steam. If the Surgeon-General of the United States will instruct his "young and inexperienced officers," (see circular June 17th, 1863,) in the use of this one article, no more "cases of sloughing phagedena," (see Assistant Surgeon's St. Louis circular, May 7th, 1863,) need be reported.

I know that in private practice a stupid-minded man will swallow a dose of mercury, and neglect the oil, salts, or pills to cause the cathartic to act. I know that the little powders or medicines will be taken the day you call on a patient, and the "calomel powder" be left untaken; and when ten days or a month after the patient is again sick, he will swallow the calomel on *his own responsibility* and call you to see his "sore mouth and gums," just as though you had anything to do with it. And I do not believe the army exempt from contingencies. But how a man of decent common sense can have an ulcer or "phagedena of the cheek," (see Assistant Surgeon-General's circular, May 7th, 1863,) with chlorate of potash in the list of medicines, is beyond my comprehension. And how, after these many years' use of this article in Europe and America, he can be ignorant of chlorate of potash, and call himself an intelligent practitioner, I cannot understand. If the Surgeon-General will issue three pounds of chlorate of potash to every half pound of calomel, the abuse of mercury need never again be named.

Again, I say of chlorate of potash as of iodide of mercury, it can be used as one pleases, in a few grains at a time, or it may be given in drachm doses every two hours till salivation is stopped. Of the comparatively new remedies, these two are safe as to all reasonable use. Not being one of the "more eminent members of the profession," (see circular, June 12th,) I did not receive the circular from the Surgeon-General's office. And being only middle-aged and no politician, I can only claim the honor of having gone to Washington, with my own private instruments of the best make, and offered the Surgeon-General a month's time gratuitously, and being told no one was needed, at a time when at least three thousand lay with undressed wounds.

But private insults aside, the circular of the Surgeon-General I believe has surprised the profession generally, no matter how much needed.

The articles mentioned by EDWARD PARRISH in the July 4th number of the REPORTER I constantly use. They will never be wholly discarded by those who once have learned their use. Yet they can never supersede iodine, mercury, or other well-tried articles.

I have forgotten to say that I do not use tartar emetic. I believe that, except for inflammatory congestive croup, pleurisy, and inflammation of the lungs, the article had better be utterly discarded;

and that most cases of the diseases just named can better be treated without than with it. The use of it must be very rare indeed in the army. I say this of tartar emetic notwithstanding the heroic virtues once claimed for it in so many diseases.

Yours, &c.,

S. J. PARKER, M. D.

News and Miscellany.

Pension Examining Surgeons.

Massachusetts.—Dr. CYRUS TEMPLE, Heath.
Iowa.—Dr. J. T. KENNEDY, Tipton.
New York.—Drs. SAM'L LENDRESS, Danville; M. A. CUSHING, Glenn's Falls; MARCUS T. PEAKE, Gloversville.

Appointments.

Drs. SHEPHERD, KARPER, and MAGOFFIN, late Resident Physicians at the Philadelphia Hospital, and Dr. T. T. PRICE, of Tuckerton, N. J., have received appointments as Assistant Surgeons at the Mower U. S. A. Hospital, (Chestnut Hill,) in this city.

Detailed for Duty.

The following medical officers have been detailed for duty connected with the draft in the following States, and will report at once by letter to the Provost-Marshal-General.

For Maine, New Hampshire, and Vermont.—Assistant Surgeon H. E. BROWN, U. S. A.

For Massachusetts.—Surgeon A. A. McLAREN, U. S. A.

For New York.—Assistant Surgeon W. WEBSTER, U. S. A.

For Rhode Island and Connecticut.—Surgeon L. A. EDWARDS, U. S. A.

For Pennsylvania.—Assistant Surgeon C. H. ALDEN, U. S. A.

Surgeon R. B. McCoy, United States Volunteers, now on duty at Balfour General Hospital, Portsmouth, Va., has been ordered to report in person to Brig.-Gen. JAS. CARLETON, commanding Department of New Mexico.

Surgeon A. P. MAYHART, now at Louisville, Ky., is assigned to duty as Medical Purveyor in that city.

Ohio College of Dental Surgery.

The Eighteenth Annual Session of the Ohio College of Dental Surgery will commence on the first Monday of November, and continue till the 20th of February succeeding.

Compressed Bread.

To replace the indigestible hard biscuit used in the French army and navy, a preparation of compressed bread has been introduced. Small loaves, baked in tins, are thoroughly dried, and then pressed into cakes (four inches square and three quarters of an inch thick) by a machine, invented and patented by M. MARINONI, of Paris. The cakes recover their original dimensions when put into water.

Rebel Wounded at David's Island, N. Y.

There are at the hospitals on David's Island two thousand eight hundred wounded rebel prisoners. They receive treatment and care as thorough and as good as are given our own soldiers. The medical and nursing attendance is provided by the Government and somewhat by private donation, and is in every respect such as the sick and forlorn should receive in a Christian country.

Unfermented Bread.

This new system of bread-making was the result of a long course of experiments by Messrs. PERRY and FITZGERALD, the original inventors, who resided in New York. A patent was obtained both in this country and in England, and at the present time the business is carried on to a very large extent in England.

The business was introduced into this city by Mr. W. E. CAMP, in the summer of 1861, who located his bakery on the corner of Broad and Buttonwood streets, and erected facilities for the manufacture of about fifty barrels of flour per day into the bread. It soon became apparent that largely increased facilities would be necessary to supply the demand, and the building occupied by him was extended sufficiently to receive additional ovens and other machinery sufficient to convert one hundred barrels of flour into the bread every twenty-four hours.

The demand for this bread has been variable to the present time, but constantly increases of late among families.

At the present time the average of sales is over fifty barrels of flour per day, which is distributed in all parts of the city to regular subscribers.

The process is perfectly cleanly, as the dough is not touched by the hands during the kneading, and is made light by the infusion of carbonic acid gas, by mechanical means, so that there is no chemical change effected in the constituents of the flour, and no drugs of any sort are used, leaving a perfectly pure loaf free from all objectionable matter.

On the 1st of January last, Mr. CAMP associated with him Messrs. THOS. POTTER and GEO. C. BOWER, who are well known in this community as men of large means and thorough business habits, and if anything was needed to inspire the fullest confidence of the public in the character of the concern and give a pledge of its success, this must be fully met by the accession of these gentlemen.

In connection with the unfermented bread, this establishment is now manufacturing a great variety of cakes and crackers of a superior quality, designed particularly for family use.

The crackers are not made by the unfermented plan, but after the old method.

Bread is now being successfully manufactured by the new process in many of our larger cities, and is highly prized by many who suffer from fevers, dyspepsia, and similar complaints.

We constantly use this bread in our family, and can give unqualified testimony to its uniform excellence. We regard it as particularly well adapted to the use of dyspeptics, and persons troubled with flatulence.

The Wounded at Gettysburg.

Dr. GORDON WINSLOW writes as follows, under date of Gettysburg, July 27th:

"You have ere this learned that I am again in the field with the Sanitary Commission. It is a field with which I am familiar, I believe, in all its parts. Few, however, know or imagine the value of its operations except those who see the absolute necessities not to say luxuries supplied to our sick and wounded soldiers. The wagons and agents of the Sanitary Commission were on the field, in the very midst of battle, long before any other supplies were within reach. In fact, two wagons, with the drivers and agents, fell into the hands of the enemy, and are not yet released, so far as we know. The rebels, however, have uniformly been treated with so much kindness and consideration by the commission, that it is presumed they will not long retain those of their agents who were taken without arms, and while dispensing mercies to the wounded, both friend and foe. My first work was to visit all the rebel hospitals, obtain the number of wounded, attendants, physicians,

etc., etc. In hospitals exclusively devoted to them, I found some seven thousand, and in other portions of the field, where they were mingled with Union men, about the same number. In all, the wounded on our side amounts to fourteen thousand two hundred, (14,200) and on the rebel side to about sixteen to eighteen thousand, (16,000 to 18,000).

The killed were nearly equally divided, amounting to about ten thousand, (10,000) making an aggregate of killed and wounded forty thousand and two hundred, (40,200)—quite a little army. It has been our work to take care, as far as possible, of this army of wounded men, or rather to supply material for others to do it. All the hospitals make their requisitions regularly and freely for all imaginable necessities. We have for the last two weeks been sending off by rail some six or eight hundred daily, all of whom we feed at the depot, and have large tanks of water placed in the cars, a surgeon and attendants with stimulants, and anodynes, &c., &c. We have a large depot at the railroad station, with tents to accommodate some three or four hundred, which have been full nearly all the time, day and night, though regularly shipped twice a day. As soon as one crowd left another came, all waiting, as at the pool, for their chance for healing meats and drinks and for conveyance to some distant hospital. I have had the charge of all the departments for some two weeks; it gives me full employment. We are now erecting tents at the general hospital for our stores, and probably, in a week or two, shall find it unnecessary to remain longer in the city. The battle-field is very extensive, and is visited by thousands. I expect to be ordered to the front before long, perhaps in a week or two."

Meteorology for July.

A correspondent of the *Daily Press* furnishes the following meteorological statistics for the month of July, 1863 and 1863, also the average for thirteen years. During the past month there were twenty-seven cloudy days.

	July, 1863.	July, 1862.	July, 13 years.
Thermometer.			
Highest	88. 0°	95. 5°	100. 5°
Lowest	65. 0	53. 0	53. 0
Mean daily range.	3.23	4.23	3.70
Means at 7, A. M..	74.40	71.13	73.79
Means at 2, P. M..	80.24	82.06	83.42
Means at 9, P. M..	76.32	73.60	76.18
Means for month..	76.99	75.60	77.80
Barometer.			
Highest	29.988 in.	30.156 in.	30.212 in.
Lowest	29.524	29.487	29.443
Mean daily range..	0.079	0.107	0.099
Means at 7, A. M..	29.800	29.743	29.842
Means at 2, P. M..	29.780	29.724	29.813
Means at 9, P. M..	29.807	29.731	29.829
Means for month..	29.796	29.733	29.828
Mean dir'en wind. S. 11° W.		S. 58½° W.	S. 58½° W.

The changes of temperature were less during the last month than ever before observed. The highest temperature was lower, and the lowest higher than usual.

The warmest day was the 26th, with a mean temperature of 81.67°. The coldest day was the 17th—mean temperature 70.5°.

The number of rainy days was greater than ever before observed for the month of July. The nearest approach to it was in July, 1861, and July, 1853, in each of which there were fourteen rainy days. The amount of rain was exceeded in 1853 and in 1855.

J. A. R.

GROSS' Military Surgery.

An edition of Dr. GROSS' Manual of Military Surgery has been published in the insurgent States. It makes a book nearly twice the size of the original edition.

Artificial Petrification of Animal Tissue.

In one of his interesting European letters to the *Amer. Med. Times*, descriptive of the principal hospital and other medical institutions of Florence, Prof. CHAS. A. LEE thus notices a very important discovery, a knowledge of which appears to have been lost through the cold indifference to new ideas and narrow prejudice against progress which so generally prevails, to the great disadvantage of science and the injury of those noble pioneers of truth who promote its advancement.

"In the museum of this school, also, are the celebrated preparations of LEGATO, who died about thirty years ago. This celebrated anatomist discovered a mode of changing all animal tissues into stone without changing their form or color in the slightest degree, and even preserving the natural flexibility of the ligaments, tendons, and joints, etc. Here is a tablet, perhaps a foot and a half square, inlaid with splendid mosaics in ornamental figures, consisting entirely of the various textures of the body converted into stone, hard and smooth as polished marble. For example, a portion of liver, lung, spleen, skin, kidney, penis, uterus, cartilage, muscle, brain, nerve, spinal cord, membrane, eye, bone, etc., etc., all retaining their natural color, and readily recognized by the anatomist. This celebrated genius did not meet with that encouragement which he expected and deserved for his most important discovery, the government entirely ignoring his valuable services, and the secret accordingly perished with him. Among the animals converted into stone I noticed the rat, cat, spider, fishes, etc., all looking perfectly natural."—*Druggists' Circular*.

ANSWERS TO CORRESPONDENTS.

Dr. J. K., Pennsylvania.—We can get you a set of bleached bones not wired for \$20. A wired skeleton, bleached, will cost from \$25 to \$35.

Dr. S. Y., Maine.—As we understand the law, re-enlistment will not invalidate a pension due for services previously rendered. A medical man who does not wish to enter the army as a surgeon, might go as a hospital steward or nurse, perhaps.

MARRIED.

HOUGHTON-WATSON.—On Tuesday, July 21, at St. Peter's Church, Westchester, by Rev. C. D. Jackson, D. D., Henry G. Houghton, Esq., M. D., and Lydia, eldest daughter of Wm. Watson, Esq., of Wilmont.

KALES-DAVIS.—In Chicago, Ill., Francis H. Kales, Esq., and Miss Nellie P., daughter of N. S. Davis, M. D., of that city.

LEWIS-ARAT.—At the residence of the bride's father, on the 30th of July, by Rev. John Thompson, Dr. S. R. Lewis, of Washington, D. C., to S. Malinda, youngest daughter of Dr. A. Merritt Arat, of this city.

DIED.

NELSON.—Dr. Wolfred Nelson, a physician of some prominence, died in Montreal, Canada, on the 17th of June, aged 71 years.

SMITH.—In Danville, Va., on the 10th inst., of typhoid fever, Dr. Walter P. Smith, son of Prof. N. R. Smith, of Baltimore, Md.

WILLIAMS.—At Alder Creek, Oneida County, N. Y., on Monday, July 13, very suddenly, Sarah Ann Graham, wife of Platt Williams, M. D., formerly of Albany.

METEOROLOGY.

July	20,	21,	22,	23,	24,	25,	26.
Wind.....	S.	S. W.	N. W.	S. W.	S.	S. W.	S.
Weather....	Clear.	Clear.	Clear.	Clear.	Cl'dy. Shw'r Th'dr 1-10	Clear. Rain.	Clear. Shw'r
Depth Rain...						8-10	
Thermometer							
Minimum.....	66°	68°	68°	61°	65°	68°	69°
At 8 A. M.....	75	77	69	72	71	75	76
At 12 M.....	80	80	77	80	79	81	85
At 3 P. M.....	83	81	78	80	83	85	86
Mean.....	76	76.5	73	73.2	74.5	77.2	79
Barometer.							
At 12 M.....	30.1	29.8	30.1	30.1	30.1	30	29.9

Germantown, Pa.

B. J. LEEDOM.

VITAL STATISTICS.

	Philadelphia. Week ending July 26.	New York. Week ending July 18.	Baltimore. Week ending July 18.	Boston. Week ending July 18.	Providence. Month of June.
Population in 1860..	565,529	805,651	212,418	177,812	50,666
Mortality.					
Male.....	266	385	63	39	...
Female.....	97	278	53	33	...
Adults.....	92	257	29	...	...
Under 15 years.....	263	...	83	...	...
Under 2 years.....	222	...	51	...	...
Total.....	463	663	116	72	...
Deaths in 100,000...	81.87	82.30	54.61	40.49	...
American.....	339	435	...	55	...
Foreign.....	70	108	...	19	...
Negro.....	22	13	10	...	...
ZYMOTIC DISEASES.					
Cholera, Asiatic....	1	...	...	...	...
Cholera Infantum..	89	104	16	6	...
Cholera Morbus....	...	4	...	1	...
Croup.....	4	8	2	4	...
Diphtheria.....	19	37	6	...	...
Dysentery.....	6	9	1	2	...
Erysipelas.....	1	3	1	...	...
Fever, Intermittent	...	...	...	...	...
Fever, Remittent...	...	...	...	...	...
Fever, Scarlet.....	4	20	6	...	...
Fever, Typhoid....	10	...	...	4	...
Fever, Typhus.....	...	33	...	...	...
Fever, Yellow.....	...	...	...	...	...
Hooping-cough.....	1	1	2	...	...
Influenza.....	...	...	...	...	...
Measles.....	3	7	...	...	...
Small Pox.....	3	1	7	...	...
Syphilis.....	...	...	...	...	...
Thrush.....	...	...	...	...	...
SPORADIC DISEASES					
Albuminuria.....	...	3	...	...	...
Apoplexy.....	1	5	1	...	...
Consumption.....	39	53	15	4	...
Convulsions.....	17	50	2	1	...
Dropsy.....	12	33	5	7	...
Gun-shot Wounds..	50	...	58	7	...
Intemperance.....	5	...	...	...	...
Marasmus.....	23	44	...	...	...
Pleurisy.....	...	...	...	2	...
Pneumonia.....	11	...	...	5	...
Puerperal Fever....	...	...	...	1	...
Scrofula.....	1	2	...	...	...
Violence and Acc'ts	13	106	2	3	...

TO CORRESPONDENTS.

For the information of those who are not authors, we will state that MANUSCRIPT INTENDED FOR PUBLICATION MUST BE WRITTEN ON BUT ONE SIDE OF THE SHEET. If greater care was taken in the preparation of copy, much trouble would be saved to printers, and mistakes would rarely or never be made.

BACK NUMBERS.

Subscribers desiring old back numbers (excepting Nos. 304, 305, 308, 309, and 310, which are still due, and will be sent) will please remember and send money to pay for them and for postage, as many of the numbers are growing scarce, and we have to prepay the postage, two cents a number.